

REMARKS

The Applicants have now had an opportunity to carefully consider the comments set forth in the Office Action mailed June 9, 2004. Amendment, reexamination and reconsideration of the application are respectfully requested.

The Office Action

In the Office Action mailed June 9, 2004:

claims 1-5, 8-12, 18-20 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,745,883 to Krist ("Krist") in view of U.S. Patent No. 6,535,297 to Steele ("Steele");

claims 6-7, 16, 17, 21-22 were rejected under 35 U.S.C. §102(b) as being anticipated by Krist; and,

claims 13-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Krist in view of U.S. Patent No. 6,657,742 to Kassmann ("Kassmann").

The Present Application

By way of brief review, the present application is directed toward a configurable billing module that can support, by virtue of its configurability, a wide variety of machines and systems. For example, the billing module can support or perform accounting functions for a variety of document processing systems. For instance, the billing module accepts a billing strategy from an associated document processing system. The billing strategy lists parameters, events, or aspects of interest that the billing module is to monitor. Additionally, the billing strategy provides algorithms that define the function of billing meters. The billing module can instantiate and/or update the meters based on the monitored parameters or aspects of interest as indicated by the billing strategy. The list of aspects of interest and the list of meter descriptions may be arbitrarily long. The ability of the billing module to receive and interpret arbitrary or custom billing strategies allows the billing module (or the software associated with the billing module) to be reused in a wide variety of applications. Device developers need only define the billing strategy, therefore, the need to "hard code" custom billing software for each new device is eliminated. For example, the billing strategy includes a script for instantiating and updating billing meters, and includes implicit or explicit communication mechanisms and data

parsing information. (Abstract, page 1, lines 13-17, page 6, lines 1-3, lines 13-17, page 7, lines 25-26, page 9, lines 14-29).

The Cited References

Krist discloses a billing system for use with a document processing system. The billing systems includes a configurable billing information file including a plurality of current incrementable billing meters. Each current incrementable billing meter corresponds with a set of one or more attribute values, and an information set including event related information, with the event related information indicating that a new incrementable billing meter is to be added to the plurality of current incrementable billing meters or that one of the plurality of current incrementable billing meters is to be deleted. The billing system further includes a billing meter manager, responsive to the information set, for causing the new incrementable billing meter to be added to the configurable billing information file or for causing one of the plurality of current incrementable billing meters to be deleted from the configurable billing information file (Abstract).

However, it is respectfully submitted that Krist does not disclose or suggest a billing module (or software associated therewith) can be reused in a wide variety of devices or in a wide variety of document processing systems. Instead, it is respectfully submitted, Krist is directed to adding or deleting meters in a given system (column 1, line 67 - column 2, line 3).

It is respectfully submitted that Steele is not available as a reference against the claims of the present application. It is respectfully submitted that Steele only qualifies as prior art under one or more of subsections (e), (f), and (g) of 35 U.S.C. §102. Additionally, at the time the invention was made, Steele was owned by the same person (Xerox Corporation) or subject to an obligation of assignment to the same person as the present application. Therefore, Steele cannot preclude patentability under 35 U.S.C. §103.

It is respectfully submitted that Kassmann is also unavailable as a reference in a 35 U.S.C. §103 rejection against the claims of the present application because Kassmann is only available as a reference under 35 U.S.C. §102(e), (f) or (g) and, at the time the invention was made, was owned by the same person, or subject to an obligation of assignment to the same person (Xerox Corporation).

The Claims Are Not Obvious

Claims 1-5, 8-12, 18-20 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Krist in view of Steele.

In explaining the rejection of **claim 1**, the Office Action stipulates that Krist does not specifically teach a coded strategy for the billing process. The Office Action relies on Steele for this disclosure. However, as explained above, it is respectfully submitted that Steele is only available as a reference under 35 U.S.C. §102(e), (f) or (g) and, at the time the invention was made, was owned by the same person, or subject to an obligation of assignment to the same person as the present application, and may not preclude patentability of the present application.

For the foregoing reasons, it is respectfully submitted that **claim 1**, as well as **claims 2-5**, which depend therefrom, is not anticipated and is not obvious in light of Krist and Steele taken alone or in any combination.

Additionally, it is submitted that Krist discloses a complete billing system. There is no suggestion in Krist, or in the art in general that Krist could or should be modified according to any auditron system. It is respectfully submitted that the motivation to do so is only found in the present application. Therefore, the rejection of **claims 1-5** is based on impermissible hindsight.

For the foregoing additional reasons, **claim 1** as well as **claims 2-5**, which depend therefrom, is not unpatentable as suggested.

Furthermore, **claim 1** has been amended to recite, a coded billing strategy including an arbitrarily long list of aspects of interest and an arbitrarily long list of meter descriptions defined for the machine, and a plurality of meters updated by the billing system for recording the delivery of the aspects of the product or service based on the billing strategy, whereby the billing system tallies the aspects in a manner defined in the billing strategy. The amendments to **claim 1** are supported throughout the specification and at page 6, lines 13-14 and page 7, lines 25-26 in particular.

It is respectfully submitted that Krist does not disclose or suggest a coded billing strategy including an arbitrarily long list of aspects of interest and an arbitrarily long list of meter descriptions. Indeed the Office Action stipulates that Krist does not

disclose or suggest a coded billing strategy.

For at least the foregoing additional reasons, **claim 1**, as well as **claims 2-5**, which depend therefrom, is not unpatentable as suggested.

The amendments to **claim 1** render original **claims 2 and 3** somewhat redundant. Therefore, **claims 2 and 3** have been amended. **Claim 2** has been amended to recite wherein the coded billing strategy further comprises information regarding a format in which information regarding the aspects of interest will be communicated to the billing system by the machine. It is respectfully submitted that the subject matter recited in **claim 2** enhances the ability of a billing module (or software associated therewith) to be reused in a wide variety of machines by further reducing the amount of information that has to be "hard coded" into a billing module, or known prior to billing module design. The amendment to **claim 2** is supported throughout the specification, and for example, at page 6, lines 15-17 and page 7, lines 15-24 in particular. It is respectfully submitted that Krist does not disclose or suggest a billing strategy comprises information regarding a format in which information will be communicated, and it is respectfully submitted that Steele is not available as a reference in a rejection under 35 U.S.C § 103.

For at least the foregoing additional reasons, it is respectfully submitted that **claim 2** is not anticipated is not obvious as suggested.

Claim 3 has been amended to recite wherein each meter in the list of meters is described as a function of at least one of the listed aspects of interest. The amendments to **claim 3** are supported throughout the specification and, for example, at page 7, line 26 - page 9, line 13 in particular. Arguments similar to those submitted in support of **claim 1** are submitted in support of **claim 3**.

Claim 4 was amended to depend from **claim 1** due to the amendments to **claim 1 and claim 3**.

Claim 5 has been amended to recite wherein the plurality of meters are instantiated in memory, by the billing system, according to the coded billing strategy. The amendments to **claim 5** are supported throughout the specification, and, for example, at the Abstract, at line 5, page 9, lines 8-13 and page 13, lines 9-15. Arguments similar to those submitted in support of **claim 1** are submitted in support of **claim 5**.

In explaining the rejection of **claim 8**, the Office Action stipulates that Krist

does not specifically teach wherein the list of aspects of interest comprises an impression count and it is respectfully submitted that Steele is not available as a reference in a rejection under 35 U.S.C § 103.

Additionally, **claim 8** depends from **claim 6**. It is respectfully submitted that, as will be explained in greater detail below, and the assertions of the Office Action to the contrary notwithstanding, **claim 6** is not anticipated by Krist.

Also, as noted above, Steele is not available as a reference against the claims of the present application.

For at least the foregoing reasons, **claim 8** is not unpatentable as suggested.

With regard to **claim 9**, the Office Action asserts that Steele discloses an impression event flag and directs the attention of the Applicants to FIG. 7 in support of the assertion. However, it is respectfully submitted that Steele is not available as a reference in a rejection under 35 U.S.C § 103.

With respect to **claim 10** the Office Action asserts that Steele discloses the list of aspects of interest comprises a set count. However, it is respectfully submitted that Steele is not available as a reference in a rejection under 35 U.S.C § 103.

With regard to **claim 11**, the Office Action asserts that Steele discloses a list of aspects of interest comprises a set completion flag. However, it is respectfully submitted that Steele is not available as a reference in a rejection under 35 U.S.C § 103.

With regard to **claim 12**, the Office Action asserts that Steele teaches a list of aspects of interest comprises a diagnostic impression flag. However, it is respectfully submitted that Steele is not available as a reference in a rejection under 35 U.S.C § 103. Additionally, arguments similar to those submitted in support of **claim 1** and **claim 8** are submitted in support of **claims 9-12**. Steele is not available as a reference. Additionally, **claims 9-12** depend from **claim 6**, and as will be explained in greater detail below, **claim 6** is patentably distinct.

For at least the foregoing reasons, **claims 9-12** are not unpatentable as suggested.

Claim 18 depends from **claim 16**. As will be explained in greater detail below, **claim 16** is not anticipated by Krist.

For at least the foregoing reason, **claim 18** is not unpatentable as suggested.

In explaining the rejection of **claim 19**, the Office Action asserts that Krist discloses a method for developing and using a universal billing module, the method comprising predefining a billing strategy. In support of this assertion the Office Action directs the attention of the Applicants to column 6, lines 41-58. However, column 6, lines 41-58 describe what Krist refers to as a conventional system for handling billing in an electronic reprographic system (column 6, lines 41-43). It is respectfully submitted that this section can not disclose a universal billing module as is described in the present specification, since, in the system described in the reference section, billing meters are hard coded (column 6, lines 55-57). It is respectfully submitted that it is this hard coding that the subject matter of the present application seeks to avoid (page 2, line 21 - page 4, line 9).

Further, the Office Action asserts that Krist discloses storing the billing strategy in a machine readable form and directs the attention of the Applicants to column 6, line 57 - column 7, line 12. However, it is respectfully submitted that the referenced paragraph points out similarities between the system of Krist and the conventional (i.e., ; hard coded) billing arrangements (column 6, line 59). Column 6, line 65 - column 7, line 12 describe communications between a billable event generator and a meter manager and some operations of the meter manager. However, it is respectfully submitted that the referenced section does not disclose or suggest a method for developing and using a universal billing module, the method comprising predefining a billing strategy and storing the billing strategy in a machine readable form as disclosed in the present specification and recited in the claims of the present application.

Additionally, **claim 19** has been amended to recite predefining a billing strategy specification, the billing strategy specification including a list of parameters with implicit or explicit communication mechanisms and data parsing information, and processing algorithm information in the form of a machine readable script, storing the billing strategy specification in a machine-readable form, reading the stored billing strategy specification, instantiating meter data structures as directed by the read billing strategy specification, monitoring a document processing procedure as directed by the read billing strategy specification, and updating the meter data structures as directed by the read billing strategy specification.

The McGraw Hill Dictionary of Scientific and Technical Terms, Sixth Edition,

defines a script as an executable list of commands written in a programming language.

The amendments to **claim 19** are supported throughout the specification and, for example, at page 7, lines 25-26, page 6, lines 13-15, page 13, lines 4-8 and in the Abstract.

It is respectfully submitted that Krist do not disclose or suggest a billing strategy specification, a billing strategy specification including implicit or explicit communication mechanisms, a billing strategy including data parsing information, a billing strategy including a machine readable script, or a billing strategy including a list of parameters with implicit or explicit communication mechanisms and data parsing information, and process algorithm information in the form of a machine readable script. Additionally, it is respectfully submitted that Steele is not available as a reference in a rejection under 35 U.S.C § 103.

In explaining the rejection of **claim 20**, the Office Action stipulates that Krist does not disclose a coded billing strategy. Again, the Office Action relies on Steele for such disclosure. In this regard, arguments similar to those submitted in support of **claim 1** are submitted in support of **claim 20**.

Furthermore, **claim 20** has been amended to recite a custom billing strategy file including an arbitrarily long list of aspects of interest and an arbitrarily long list of meter descriptions defined for the machine. **Claim 20** was also amended to correct antecedents by reciting a means for loading the custom billing strategy. It is respectfully submitted that Krist does not disclose or suggest a custom billing strategy file or a custom billing strategy file including an arbitrarily long list of aspects of interest and an arbitrarily long list of meter descriptions. Additionally, it is respectfully submitted that Steele is not available as a reference in a rejection under 35 U.S.C § 103.

For at least the foregoing reasons, **claim 20** is not unpatentable as suggested.

In explaining the rejection of **claim 23**, the Office Action asserts that Krist discloses at least one aspect sensor operative to sense and report AT LEAST ONE of an impression count, an impression event, a set count, a set completion event, a diagnostic impression event, a media description, a use of highlight color and a use of full color related to a production of a document. In support of this assertion, the

Office Action directs the attention of the Applicants to FIG. 2 and column 6, line 51 - column 7, line 57. However, **claim 23** has been amended and no longer recites a set completion event.

Additionally, the Office Action asserts that Krist teaches a billing strategy file defining a billing strategy in machine readable form, the billing strategy describing at least one mathematical function of at least one meter for processing and recording information reported by the at least one aspect sensor. In support of this assertion, the Office Action again directs the attention of the Applicants to column 6, line 59 - column 7, line 12. However, the Applicants have carefully reviewed the cited portion of Krist and are unable to find a disclosure or suggestion of a billing strategy file or a billing strategy file defining a billing strategy in machine readable form, the billing strategy describing at least one mathematical function of at least one meter for processing and recording information reported by the at least one aspect sensor. Furthermore, it is respectfully submitted that the referenced section describes conventional (i.e., ; hard coded) billing systems (column 6, line 43, line 57, line 59, column 7, lines 16-18).

Furthermore, it appears that the Office Action meant to stipulate that Krist does not disclose a billing module operative to receive the billing strategy file and instantiate at least one meter according to the billing strategy and a marker module operative to control the print engine in the production of the document. The Office Action relies on Steele for this disclosure and directs the attention of the Applicants to column 6, lines 10-30, column 10, lines 55 - column 12, line 35 and column 6, lines 50-62. However, Steele is not available as a reference.

For at least these reasons, **claim 23** is not anticipated and is not obvious in light of Krist and Steele.

Additionally, **claim 23** has been amended to recite a billing strategy file defining a billing strategy in machine readable form, the billing strategy file describing an arbitrarily large number of mathematical functions of an arbitrarily large number of meters for processing and recording information reported by the at least one aspect sensor and a billing module operative to receive the billing strategy file and instantiate the arbitrarily large number of meters according to the billing strategy. It is respectfully submitted that Krist does not disclose or suggest a file describing an arbitrarily large number of mathematical functions of an arbitrarily

large number of meters or a billing module operative to receive the billing strategy file and instantiate the arbitrarily large number of meters according to the billing strategy.

With regard to the motivation to combine the references, arguments similar to those made in support of **claim 1** are made in support of **claim 23**.

For at least the foregoing reasons, **claims 1-5, 8-12, 18-20 and 23** are not anticipated and are not obvious in light of Krist and Steele.

Claims 13-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Krist in view of Kassmann.

However, **claims 13-15** depend from **claim 6**. As will be explained in greater detail below, **claim 6** is not anticipated by Krist and **claims 13-15** are not anticipated and are not obvious for at least that reason. Furthermore, it is respectfully submitted that Kassmann is only available as prior art under 35 U.S.C. §102(e), (f) or (g). It is respectfully submitted that at the time the invention was made, Kassmann was owned by the same person, or subject to an obligation of assignment to the same person (Xerox Corporation), as the present application. Therefore, under 35 U.S.C. §103(c), Kassmann shall not preclude patentability under 35 U.S.C. §103.

For at least the foregoing additional reasons, **claims 13-15** are not unpatentable as suggested.

The Claims Are Not Anticipated

Claim 6-7, 16, 17 and 21-22 were rejected under 35 U.S.C. §102(b) as being anticipated by Krist. In explaining this rejection the Office Action asserts that Krist discloses a billing strategy description accessible by the billing system and a plurality of meters defined in the billing strategy. In support of this assertion the Office Action directs the attention of the Applicants to column 7, lines 5-7. However, the referenced section recites that: since the meter manager is aware of the composition of the print job, it knows what meters should be incremented to reflect the printing of a set. However, while the referenced section suggests that a meter manager knows which meters to increment, it is respectfully submitted that the referenced section does not disclose or suggest a billing strategy description such as those disclosed in the present specification (e.g., FIG. 2, FIG. 4) and recited in **claim 6**.

For at least the foregoing reasons, it is respectfully submitted that **claim 6**, as well as **claim 7**, which depends therefrom is unanticipated by Krist.

Additionally, **claim 6** has been amended to recite a billing strategy description, including an arbitrarily long list of aspects of interest and an arbitrarily long list of meter descriptions, accessible by the billing system and a billing module operative to update the plurality of meters according to the billing strategy description. It is respectfully submitted that Krist does not disclose a billing strategy description including an arbitrarily long list of aspects of interest and arbitrarily long list of meter descriptions, or a billing module operative to update the plurality of meters according to the billing strategy description. Column 7, lines 2-4 of Krist disclose updating meters. However, it is respectfully submitted that the updating is not done according to a billing strategy description such as those disclosed in the present application (e.g., FIG. 2, FIG. 4) and recited in **claim 6**.

The amendments to **claim 6** are supported throughout the specification and for example, on page 6 at line 13 and page 7 at lines 25 and 26.

For at least the foregoing additional reasons, **claim 6**, as well as **claims 7-12**, which depend therefrom is not anticipated by Krist.

Additionally, **claim 7** has been amended to recite the configurable billing system of **claim 6** wherein the plurality of meters are instantiated in memory, by the billing module, according to the billing strategy description. The Office Action stipulates, for example, on page 9 at lines 15 and 16 that Krist does not disclose instantiating at least one meter according to the billing strategy.

The amendments to **claim 7** are supported throughout the specification and, for example, in the Abstract at line 5, page 9, lines 8-13 and page 13, line 13 in particular.

For at least this additional reason, **claim 7** is unanticipated by Krist.

In explaining the rejection of **claim 16**, the Office Action asserts that Krist discloses a configurable billing system operative to follow a billing strategy and directs the attention of the attention of the Applicants to the Abstract and column 2, lines 23-42 in support of the assertion.

However, the Applicants respectfully disagree. It is respectfully submitted that Krist does not disclose or suggest a billing strategy such as the billing strategies disclosed in the present specification and recited in the claims of the present

application (e.g., FIG. 2, FIG. 4).

Additionally, **claim 16** has been amended to recite a configurable billing system operative to follow a billing strategy specification including an arbitrarily long list of document production events of interest and an arbitrarily long list of meter descriptions, and a machine readable script for updating the meters defined in the list, to record the occurrence of the document production events as described in the billing strategy specification. It is respectfully submitted that even if Krist discloses a billing strategy, Krist does not disclose or suggest a billing strategy specification. Moreover, Krist does not disclose or suggest a billing strategy specification including an arbitrarily long list of document production events of interest and an arbitrarily long list of meter descriptions and a machine readable script for updating the meters defined in the list for recording the occurrence of document production events as described in the billing strategy specification.

For at least the foregoing reasons, **claim 16**, as well as **claims 17 and 18**, which depend therefrom, is not anticipated by Krist.

In explaining the rejection of **claim 17**, the Office Action asserts that Krist teaches the document processing system of **claim 16**, wherein the marker module is operative to deliver the billing strategy to the billing system. In support of this assertion, the Office Action directs the attention of the Applicants to column 7, line 50 - column 8, line 59. In so doing, it appears that the Office Action is attempting to draw an analogy between the "requests" depicted in FIG. 3 as "descriptions" and described as "requests" in reference to FIG. 4, and the billing strategy recited in **claims 16 and 17**. However, it is respectfully submitted that disclosure of the requests or descriptions of Krist is not a disclosure or a suggestion of the billing strategy disclosed in the present specification and recited in **claims 16 and 17**. For example, the requests of Krist are generated each time a selected subsystem performs a function relative to a given document (column 7, lines 43-47). Additionally, **claim 16** has been amended to indicate that the billing strategy is a billing strategy specification including a machine readable script for updating the meters defined in the list.

The McGraw Hill Dictionary of Scientific and Technical Terms, Sixth Edition, defines a script as an executable list of commands written in a programming language.

It is respectfully submitted support for the amendments to claim is found throughout the specification and, for example, on page 13, lines 3-18 and in the Abstract, lines 8-10.

It is respectfully submitted that Krist does not disclose or suggest a billing strategy specification including a machine readable script.

For at least the foregoing additional reasons, **claim 17** is not anticipated by Krist.

Arguments similar to those submitted in support **claims 16 and 17** are submitted in support of **claim 21**. It is respectfully submitted that the disclosure of "requests" repeatedly generated in the system of Krist is not a disclosure or suggestion of the billing strategy description recited in **claim 21**. Additionally, **claim 21** has been amended to recite a coded billing strategy description accessible by the billing system. Page 2 of the detailed Office Action stipulates that Krist does not disclose a coded strategy for the billing process.

Furthermore, **claim 21** has been amended to recite the coded billing strategy includes a machine readable script. As mentioned above, it is respectfully submitted that Krist does not disclose or suggest a billing strategy description including a machine readable script. Additionally, **claim 21** has been amended to recite a plurality of meters defined in the machine readable script as mathematical functions of information received from one or more aspect sensors and a billing module operative to update the plurality of meters according to the functions implemented by the machine readable script. The amendments to **claim 21** are supported throughout the specification, and, for example, in **claim 1**, the Abstract, and page 13, lines 3-18 in particular.

For at least the foregoing reasons, **claim 21** is not anticipated by Krist.

Claim 22 has been amended to recite a configurable billing system operative to run a machine readable script received in a billing strategy file, the machine readable script being operative to instantiate and update a set of meters for recording occurrences of document production events and a marker module operative to control the print engine in the production of documents, and to report document production events to the billing system.

It is respectfully submitted that Krist does not disclose or suggest a machine readable script. Furthermore, it is respectfully submitted that Krist does not disclose

or suggest a billing strategy file. Moreover, it is respectfully submitted that Krist does not disclose or suggest a configurable billing system operative to run a machine readable script received in a billing strategy file or a machine readable script operative to instantiate and update a set of meters.

For at least the foregoing reasons, **claim 22** is unanticipated by Krist.

Telephone Interview

In the interests of advancing this application to issue the Applicant(s) respectfully request that the Examiner telephone the undersigned to discuss the foregoing or any suggestions that the Examiner may have to place the case in condition for allowance.

CONCLUSION

For the reasons detailed above, it is submitted all claims remaining in the application (**Claims 1-23**) are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

Respectfully submitted,

FAY, SHARPE, FAGAN,
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